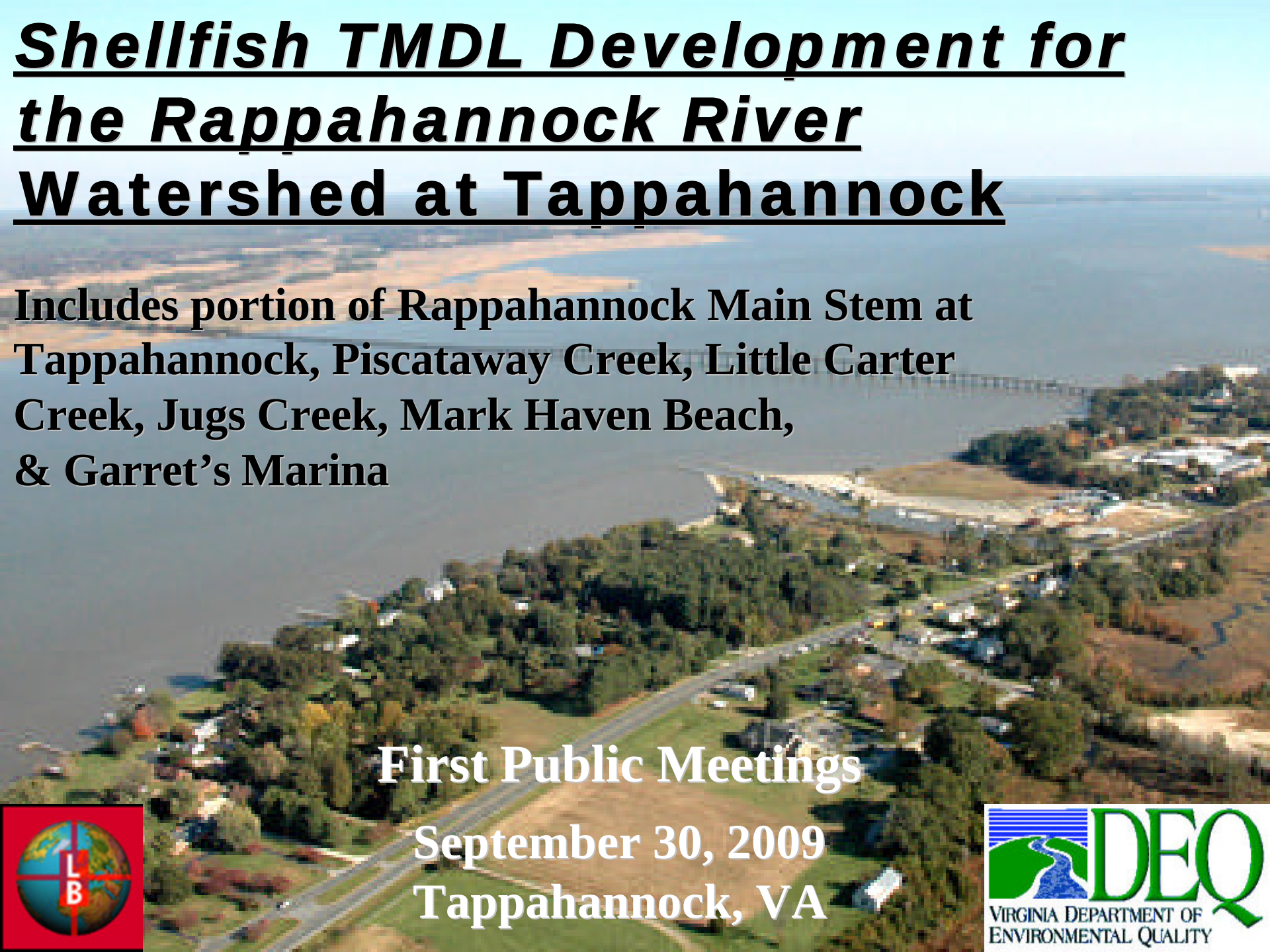
Shellfish TMDL Development for the Rappahannock River Watershed at Tappahannock

Includes portion of Rappahannock Main Stem at Tappahannock, Piscataway Creek, Little Carter Creek, Jugs Creek, Mark Haven Beach, & Garret's Marina



First Public Meetings

September 30, 2009

Tappahannock, VA

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What is a TMDL?

TMDL = Total Maximum Daily Load = maximum amount of a pollutant that can exist in a waterbody without violating water quality standards (WQS)

WQS = numeric or narrative limits on pollutants that ensure the protection of human health and of aquatic life

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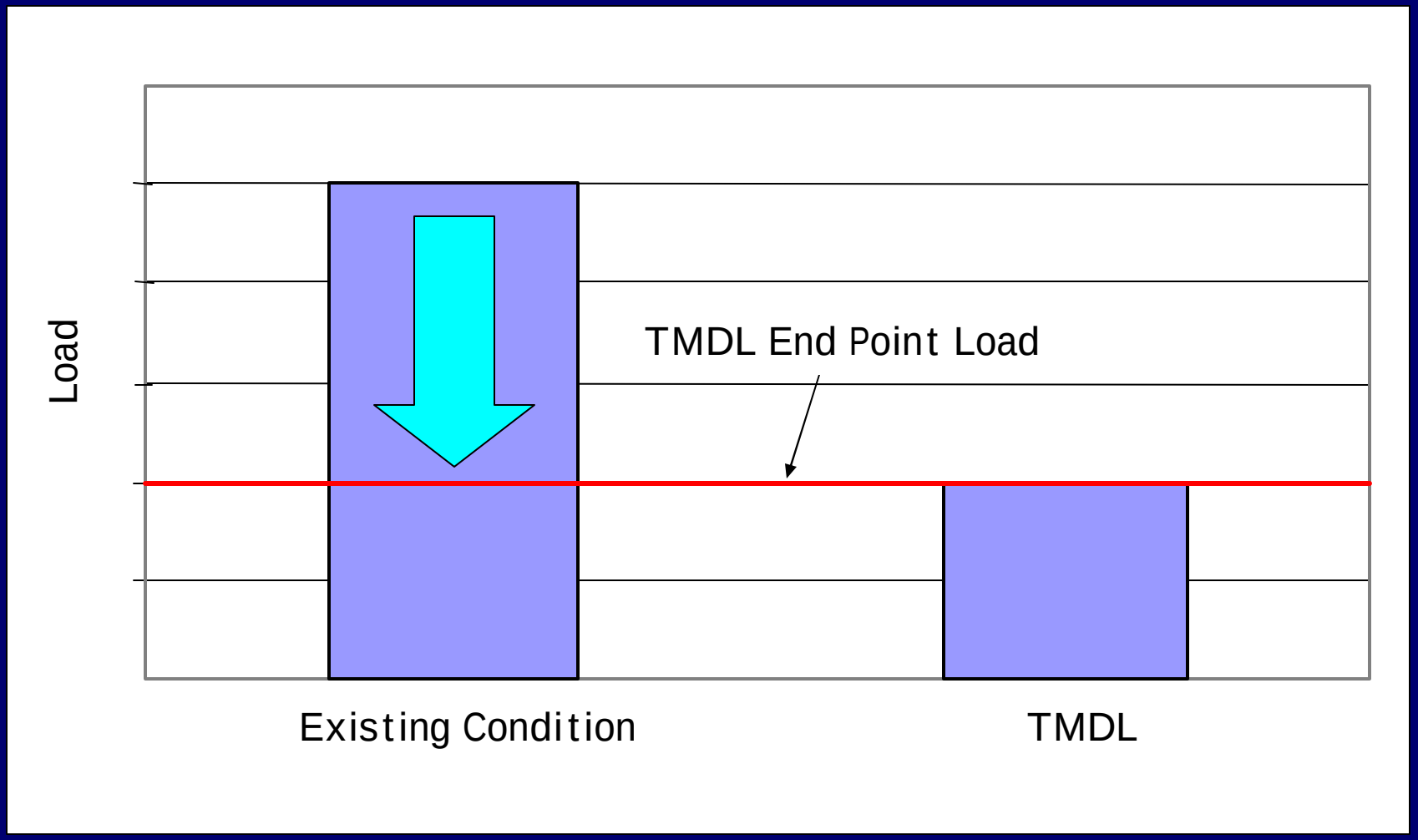
A Visual Example of a TMDL



Reducing existing bacteria load to the TMDL end point load is expected to restore water quality.

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Virginia Department of Environmental Quality

Why are TMDL studies necessary?

- TMDLs must be developed for water bodies that do not meet water quality standards for their designated uses.
- Impaired waters occur throughout Virginia in lakes, streams, and tidal waters.
- In Virginia, ~1100 TMDLs due by 2020

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Designated Uses

- Primary Contact (Swimming)
- Public Water Supply
- Aquatic Life
- Fish Consumption
- Shellfish Consumption
- Wildlife

Molluscan shellfish (oysters, clams, mussels) filter the water to feed and tend to concentrate microscopic particles, such as bacteria within their flesh. Bacteria, when concentrated in the flesh of shellfish, can pose a health risk to humans when consumed.

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People involved in the Process:

- Virginia Department of Health
- Virginia Department of Conservation and Recreation
- Contractor (Louis Berger Group)
- Other State Agencies, Local Governments and Planning Districts
- U.S. Environmental Protection Agency and other appropriate federal agencies
- Citizens groups, educational institutions environmental groups, & local business
- **YOU**!

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What information is used to develop a TMDL?

- Bacteria monitoring data (VDH & DEQ)
- Population estimates for humans, pets, wildlife, livestock (Census, VIMS, DCR, DGIF, & the public)
- Waterbody flow & volume
- Bacterial Source Tracking Data (BST)
- Land Use, Climate, Tide, etc.
- DEQ permit data
- DEQ spill response and remediation data

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Virginia's TMDL Development

- TMDL study
- Implementation Planning
- Implementation
- Post Monitor and Report on Progress

= = > * *Many opportunities for public input and participation!* *

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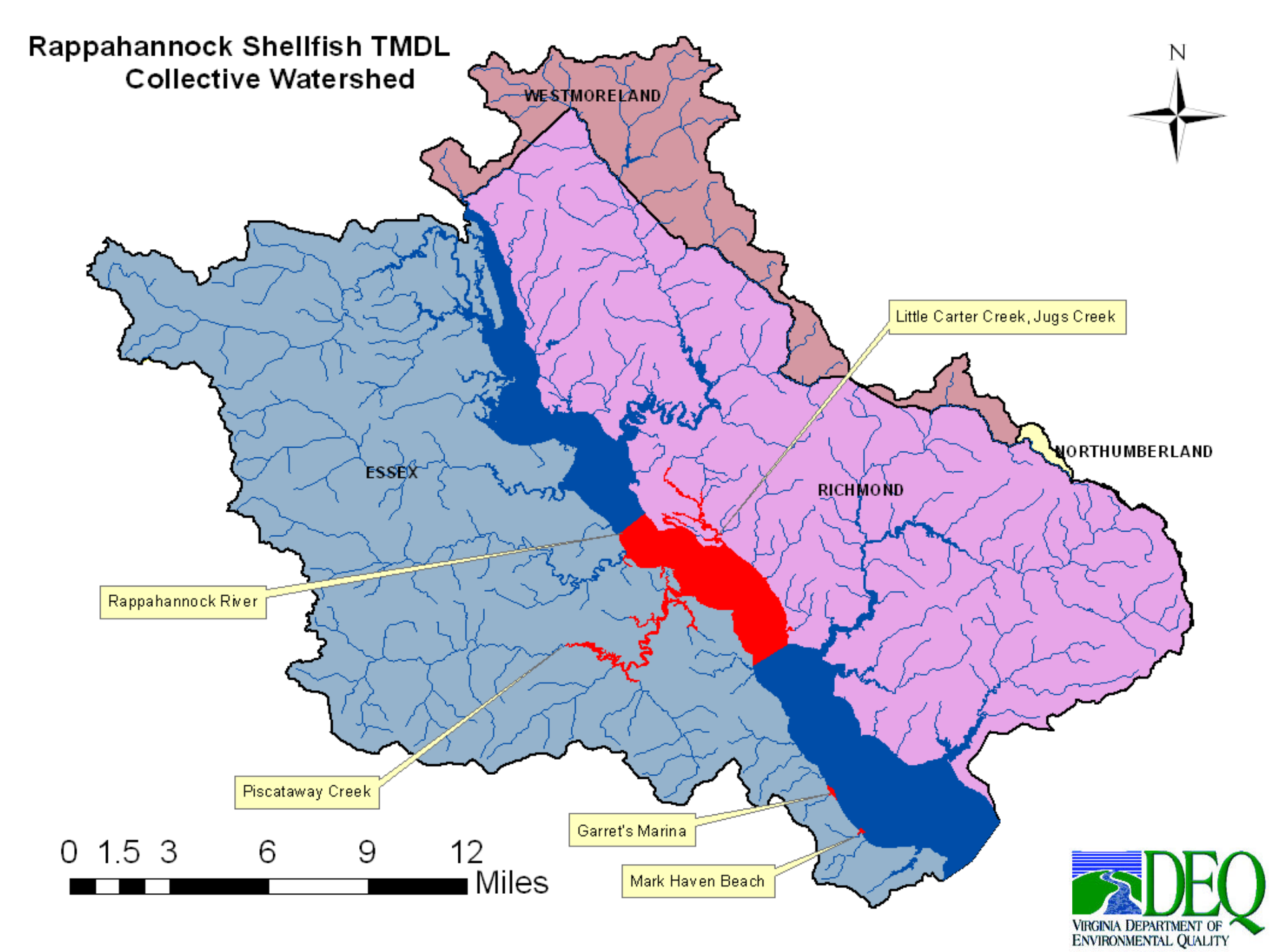
Rappahannock Shellfish TMDL
Collective Watershed
N
WESTMORELAND
Little Carter Creek, Jugs Creek
NORTHUMBERLAND
ESSEX
RICHMOND
Rappahannock River
Piscataway Creek
Garret's Marina
Mark Haven Beach
0 1.5 3 6 9 12
Miles
DEQ
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ENVIRONMENTAL QUALITY

How can you help?

PARTICIPATE IN THE DEVELOPMENT OF TMDL AND IMPLEMENTATION PLANNING!

- Attend TMDL development meetings & implementation planning meetings
- Verify our data
- Comment on the draft TMDL report during 30 day public comment period
- Minimize runoff from property
  - install pervious surfaces vs. impervious surfaces
  - Rainbarrels, raingardens, etc.
- Don’t feed wildlife!!! Educate your neighbors!
- Pick up after pets
- Maintain septic systems (5-yr pump-out; Mandatory per CBA)

Next Steps…

- **30 Day Public Comment Period**

  *****Ends October 29th, 2009*****

  - Send comments with the name, address, and telephone number of the commenter.

SEND Comments TO:

DEQ - Piedmont Regional Office
Attn: Margaret Smigo
4949-A Cox Road
Glen Allen, VA 23060
Margaret.Smigo@deq.virginia.gov

- **DEQ/Berger will continue working on developing TMDL**
- **Final public meetings tentative for late Fall**

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Questions??

Presentations and other handouts available at:
http://www.deq.virginia.gov/tmdl/mtgppt.html

VDH-DSS Website:
http://www.vdh.virginia.gov/EnvironmentalHealth/Shellfish/closureSurvey/index.htm

TMDL Website:
http://www.deq.virginia.gov/tmdl

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